

# Datasheet

**oToBrite Electronics, Inc**



**oToCAM264ISP-C120M**



## 1. General Description

The oToCAM264ISP-C120M is an automotive grade camera for the application of autonomous driving and CMS. It uses high sensitive CMOS sensor to perform good image quality for the detection purpose of the system product.

## 2. Product specification

No.	Item	Specification
1	Image sensor	CMOS (Sony IMX 390)
2	Optical Format	1/2.7"
3	Pixel Size	3.0 $\mu$ m (H) $\times$ 3.0 $\mu$ m (V)
4	ISP chip	GW5200
5	Camera number of pixels	2M (1920 (H) $\times$ 1080 (V))
6	View angle(H)	120.6°
7	Resolution	TV line center $\geq$ 600 corner (0.7F) $\geq$ 500
8	Color filter array	RGGB
9	Output Interface	GMSL2 with POC
10	Output Formats	MIPI 4lane YUV422 8bits UYVY
11	S/N ratio	48.5 dB
12	HDR	120 dB (HDR only)
13	LFM	On
14	Lens Structure	4G2P+IR
15	Lens F No.	F1.4
16	DOF	1.5M~inf (Object Distance: inf)
17	Center deviation	+/-5Pixel (Based on oToBrite testing equipment)
18	Power source (POC)/Typical	DC 9~12V/9V
19	Startup time of power in	Within 2000ms (SerDes & ISP initialization)
20	Frame rate	30 fps (By setting)
21	Serializer	MAX9295
22	Camera Current Consumption	$\leq$ 165mA @12V
23	Operating Temperature	-40°C ~ +85°C
24	Storage temperature Range	-40°C ~ +95°C
25	Waterproof	IP67/IP69K
26	Dimension	28*28*45.2 mm (exclude Fakra connector)
27	Weight	50 g
28	Warranty	3years or 100,000 kilometers

### 3. Outline Drawing

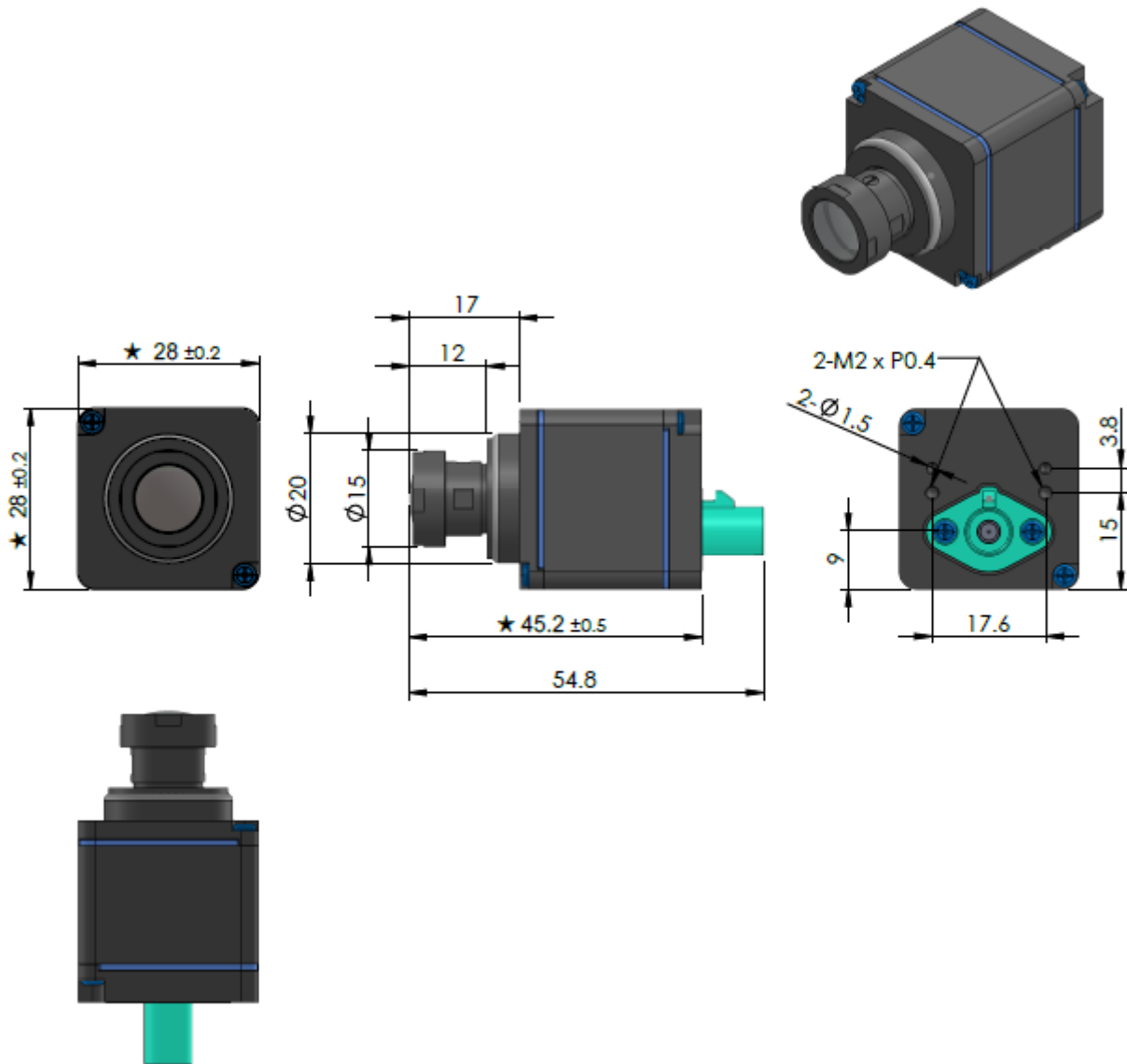


Figure 1. oToCAM264ISP-C120M Diagram

## 4. Counterpart Connector

### 4.1 Connectors: Amphenol SMB1251Y3-002-TT5GP-50

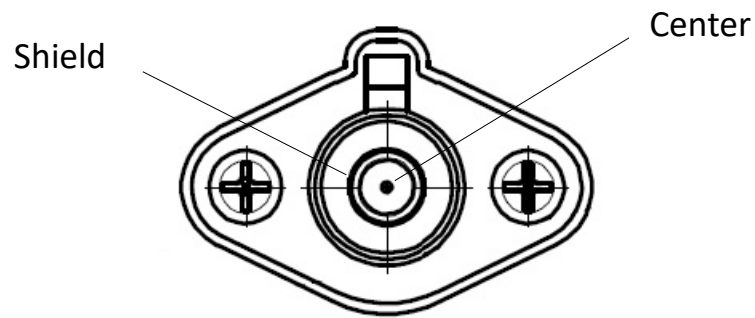


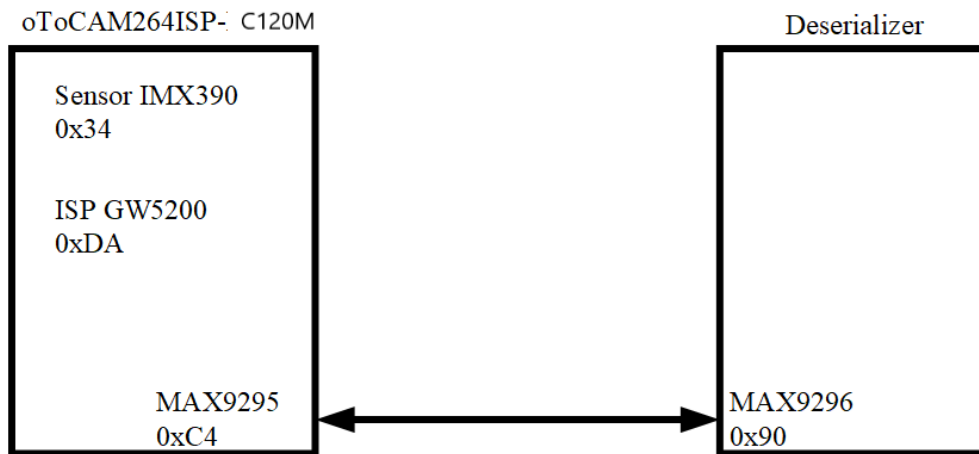
Figure 2. Amphenol SMB1251Y3-002-TT5GP-50

### 4.2 Pin definition:

Pin No.	Signal Name	Operation Voltage and Current
Center	DOUT	Min. 0.3V, Max. 0.5V
	PWR	Typ. 215mA @9V / 25°C
Shield	Shield GND	

## 5. Applications

### 5.1 I2C ID Address



## 6. Block Diagram

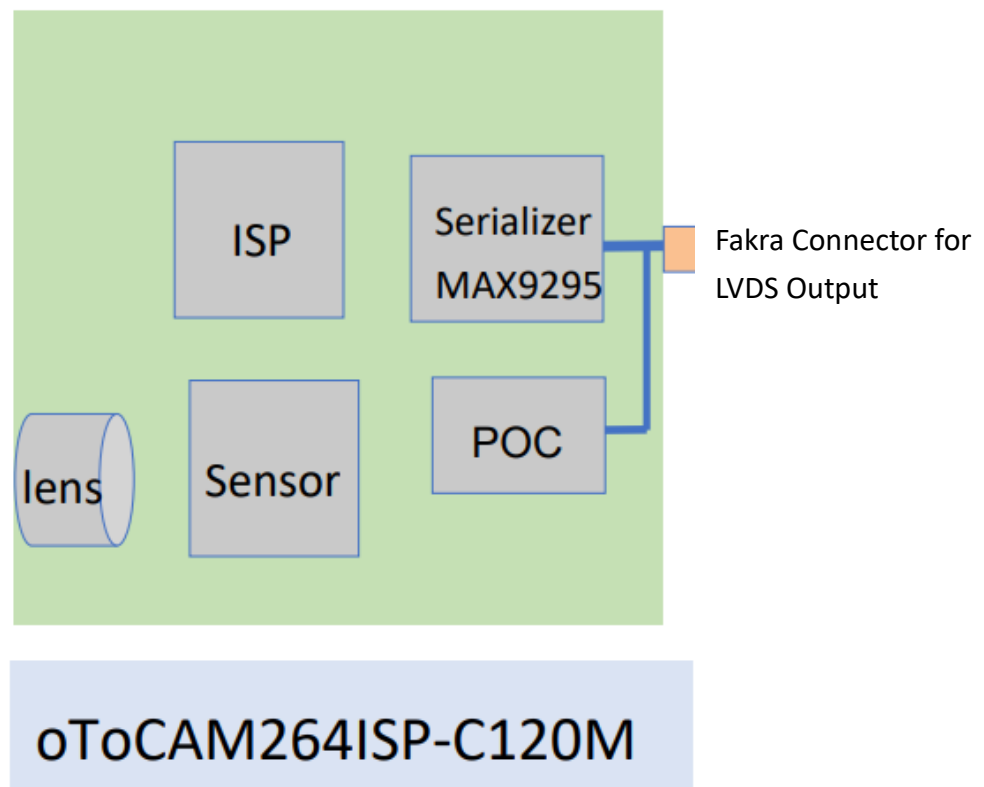


Figure 3. Block Diagram

## 7. OQC

### 7.1 Cosmetic standard

For sheet metal stamping and casting, there should be no gaps, deformations, rust, sand holes, exposed substrates, etc. (Such as exposed substrates)



This camera is a functional part and should not be regarded as an appearance part. To avoid appearance scratch, please add a cover separately.

### 7.2 Turn on

#### 7.2.1 Connected to oToCAM264 series fixture



#### 7.2.2 2. Start the lighting program and confirm the oToCAM264 series lighting screen

